

REMARKS

Reconsideration and reexamination of this application are respectfully requested. Claims 1-20 are pending in this application. Claims 1, 2, 10 and 13 have been amended pursuant to filing of a request for continued examination.

In the prior final office action mailed October 24, 2002, Claims 1-2, 9-10, 13-15 and 20 were rejected under 35 USC 102(e) as being anticipated by Tuzhilin (US 6,236,978). The Examiner stated that with respect to Claims 1, 10, 13 and 15 Tuzhilin shows providing an item of a particular type to a device having an application for engaging in a repetitive user activity with items of the particular type (col. 10 line 63 to col. 11 line 5) (with "an item of a particular type" corresponding to a "particular beer or perfume"); "engaging in a repetitive user activity with items of the particular type" corresponds to activity of a user when visits a particular Web site for a same content (col. 14, lines 21-31); the Examiner understands that "same content" can be any particular type of items; the amount of time that a user spent at each site also recorded (col. 11, line 27-29); it clearly showing a "repetitive user activity with an item of a particular type" by going to a web site for the same content each time the user visits the web site; Fig. 6c is a remote unit where the user transaction collection and recording unit is stored on the client side (col. 12, lines 39-42); the Examiner considers the remote unit to be "standalone operation" unit; generating a history of user interacting with the provided item (Fig. 6a element 115, col. 10 line 63 to col. 11 line 52); transforming the history into an implicit rating of the provided item (Fig. 6a element 140, col. 11 line 42-52; using the implicit rating of the provided item to generate recommendations of other items (Fig. 6a element 145, column 11 line 53 to column 12 line 3). Claims 3-8, 11-12, 16-19 were rejected under 35 USC 103(a) as being unpatentable over Tuzhilin. Applicant respectfully disagrees.

Applicant's invention, as claimed in Claim 1, is directed to a method for generating recommendations, comprising: providing an item of a particular type to a handheld device having an application for engaging in a repetitive activity with items of the particular type, wherein the repetitive activity comprises displaying or playing items of the particular type to a user; generating a history of user interaction with the provided item, wherein a user interaction comprises an instance of a user causing the application to display or play the provided item to the

user and duration of the display or play, wherein each user interaction occurs during standalone operation of the handheld device disconnected from a network; uploading the history of user interactions to a network recommender; transforming the history into an implicit rating of the provided item, wherein the history of user interactions with the provided item may be used to create more accurate statistical profiles; and using the implicit rating of the provided item to generate recommendations of other items of the particular type for downloading to the device. Nothing in Tuzhilin teaches or suggests Applicant's invention as presently claimed.

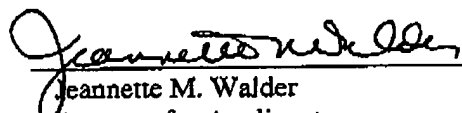
Tuzhilin teaches a method for generating a user profile based on a static profile and a dynamic profile of the user. Tuzhilin records user transactions and exploits the recorded user transactions to ultimately provide recommendations - although the primary emphasis is the exploitation of user actions to generate a user profile. Tuzhilin's method records "transactions" that occur between a client and a provider. According to Tuzhilin, a transaction may be "credit card transactions, airline reservations and Web site visit transactions." See col. 3, line 65 to col. 4 line 1. "Because a user may perform only a small number of transactions, the corresponding rules generated may be statistically insignificant, unreliable and insignificant." See col. 4, lines 32-36.

Nothing in Tuzhilin teaches or suggests "providing an item of a particular type to a handheld device having an application for engaging in a repetitive activity with items of the particular type, wherein the repetitive activity comprises displaying or playing items of the particular type to a user." Nothing in Tuzhilin teaches or suggests "generating a history of user interaction with the provided item, wherein a user interaction comprises an instance of a user causing the application to display or play the provided item to the user and duration of the display or play". The application may be one which displays visual material or one which plays audio material. In the case of a handheld device being the type that plays audio material such as music, Applicant's method records each time a user plays a particular piece of music and the duration. This user interaction is stored for use by a recommender system that will generate an implicit rating of the particular piece of music and make recommendations to the user. Collecting repetitive user activity with respect to the same item can be used to create more accurate statistical profiles and more accurate recommendations.

Nothing in Tuzhilin teaches or suggests "wherein each user interaction occurs during standalone operation of the handheld device disconnected from a network." Tuzhilin records transactions made by users. Applicant's method records each time a user causes the application to display or play the provided item to the user and the duration of the display or play. Transactions (such as credit card purchases, airline reservations and Web site visits) typically occur while the user is online and as noted above occur in statistically insignificant numbers. Listening to a piece of music several times on a handheld device, for example, occurs primarily during standalone operation of the handheld device, not when the device is connected to a network. The history of user interactions with the provided item may be used to create more accurate statistical profiles, which may be used to provide more accurate recommendations.

Reconsideration of this application and allowance thereof are earnestly solicited. In the event the Examiner considers a personal contact advantageous to the disposition of this case, the Examiner is requested to call the undersigned Attorney for Applicant, Jeannette Walder.

Respectfully submitted,


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VERSION WITH MARKINGS TO SHOW CHANGES MADE:

1. (~~Twice Amended~~) A method for generating recommendations, comprising:

providing an item of a particular type to a handheld device having an application for engaging in a repetitive activity with items of the particular type, wherein the repetitive activity comprises displaying or playing items of the particular type to a user~~engaging in a repetitive user activity with items of the particular type;~~

~~, wherein the repetitive user activity occurs primarily during standalone operation of the device;~~

generating a history of user interaction with the provided item, wherein a user interaction comprises an instance of a user causing the application to display or play the provided item to the user and duration of the display or play, wherein each user interaction occurs primarily during standalone operation of the handheld device disconnected from a network~~engaging in the repetitive user activity with the provided item;~~

uploading the history of user interactions to a network recommender;

transforming the history into an implicit rating of the provided item, wherein the history of user interactions with the provided item may be used to create more accurate statistical profiles; and

using the implicit rating of the provided item to generate recommendations of other items of the particular type.

2. (~~Amended~~) The method of claim 1, wherein the device is selected from the group consisting of a personal digital assistant for displaying visual material, an audio player for playing music, and an electronic document viewer for displaying documents.

10. (~~Twice Amended~~) A method for generating recommendations, comprising:

providing a plurality of items of a particular type to a plurality of handheld devices, each device having an application for engaging in a repetitive activity with items of the particular type, wherein the repetitive activity comprises engaging in a repetitive user activity items of the particular type, wherein the repetitive user activity occurs primarily during standalone operation

~~of the device displaying or playing items of the particular type to a user;~~

generating for each provided item in each device, a history of user interaction with the provided item, wherein a user interaction comprises a user causing the application to display or play the provided item to the user and duration of the display or play, wherein each user interaction occurs primarily during standalone operation of the handheld device disconnected from a network ~~an instance of engaging in the repetitive activity with the provided item;~~

uploading the history of user interactions to a network recommender;

transforming the history for each provided item into an implicit rating of the provided item, wherein the history of user interactions with the provided item may be used to create more accurate statistical profiles; and

using the implicit ratings of the provided items to generate recommendations of other items of the particular type.

13. (Twice Amended) A system for providing recommendations, comprising:

a plurality of devices, each device having an application for engaging in a repetitive activity with items of the particular type, wherein the repetitive activity comprises displaying or playing items of a particular type to a user ~~engaging in a repetitive activity with an item of a particular type, wherein user interaction with the repetitive activity occurs primarily during standalone operation of the device,~~ and a memory for storing a history of each user interaction with an item of the particular type with the device, wherein a user interaction comprises a user causing the application to display or play a selected item to the user and duration of the display or play and wherein each user interaction occurs primarily during standalone operation of the handheld device disconnected from a network; and

a recommendation service for storing downloaded histories of items interacted with from the plurality of handheld devices, for transforming the downloaded histories into implicit ratings of the items interacted with, wherein the history of user interactions with the provided item may be used to create more accurate statistical profiles, and for generating recommendations of new items of the particular type based on the implicit ratings.